UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,150	08/04/2003	Saverio Pezzini	02AG00753401	5104

27975 7590 08/04/2005		EXAMINER
ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A.		PATEL, NIKETA I
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ART UNIT	PAPER NUMBER
2182	

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DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/634,150	PEZZINI, SAVERIO
Office Action Summary	Examiner	Art Unit
	Niketa I. Patel	2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 August 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>5-15</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>5-15</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>14 October 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some *   c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>8/4/2003</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

2.   Claims 5-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's

admitted prior art figures 1, 2 and written description there of (hereinafter "*AAPA*") and further

in view of Kelley et al. U.S. Patent Application Publication No.: 2004/0019726 A1 (hereinafter

"*Kelley*".)

3.   **Referring to claims 5, 9, 13,** *AAPA* teaches a serial peripheral interface comprising: a

memory coupled to at least one data bus and an address bus [see *AAPA* figure 2, elements Addr,

Data in and Data out], said memory for storing data from the at least one data bus associated

with a plurality of peripheral devices based upon respective data addresses on the address bus

[see *AAPA* figure 2, element 'Command RAM' and paragraph 4], said memory having a

respective transmit data section [see *AAPA* figure 2, element 'Transmit RAM' paragraph 4] and a

respective receive data section [see *AAPA* figure 2, element 'Receive RAM' and paragraph 4] for

each peripheral device and also having a configuration command section for storing

configuration commands for use in communicating with each of the peripheral devices [see

AAPA figure 2, element 'Command RAM' and paragraph 8]; a data pointer for pointing to

transmit and receive data section addresses [see *AAPA* figure 2, element 'Pointer']; a control

register for controlling said data pointer based upon at least one configuration command

associated with a selected peripheral device [see *AAPA* figure 2, element 'CTRL']; a data

transfer circuit for serially transferring data between said memory and the selected peripheral

device based upon the at least one configuration command [see *AAPA* figure 2, elements

'Receive Shift Register' and 'Transmit Shift Register'.] *AAPA* is silent regarding a configuration

pointer for pointing to an address at which the at least one configuration command is stored in

the configuration command section based upon a data address on the at least one data bus

however *Kelley* teaches this limitation [see *Kelley* paragraph 0034, 'linked list of tasks'] in order

to provide efficient list handling methods and overcome many of the limitations of contiguous

data storage arrangement.

One of ordinary skill in the art at the time of applicant's invention would have clearly

recognized that it is quite advantageous for the system of *AAPA* to have a configuration pointer

for pointing to an address at which the at least one configuration command is stored in the

configuration command section in order to overcome many of the limitations of contiguous data

storage arrangement. It is for this reason that one of ordinary skill in the art would have been

motivated to implant *AAPA's* system with a configuration pointer for pointing to an address at

which the at least one configuration command is stored in the configuration command section in

order to overcome many of the limitations of contiguous data storage arrangement.

4.   **Referring to claims 6, 10, 14**, teachings of *AAPA* as modified by the teachings of *Kelley*

teaches wherein said memory comprises a random access memory (RAM) [see *AAPA* figure 2,

elements 'Transmit RAM' and 'Receive RAM'.]

5.   **Referring to claims 7, 11**, teachings of *AAPA* as modified by the teachings of *Kelley*

teaches wherein said configuration pointer comprises a random access memory (RAM) [see

AAPA figure 2, elements 'Command RAM'.]

6.   **Referring to claims 8, 12, 15**, teachings of *AAPA* as modified by the teachings of *Kelley*

teaches wherein the at least one data bus comprises a data reception bus for receiving data from

the peripheral devices, and a data transmission bus for transferring data to the peripheral devices

[see *AAPA* figure 2, elements 'Data in' and 'Data out'.]

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. The following documents have been made record of to further show the state of the

art as it pertains to link list: William Ford and William Topp, Data Structures with C++, 1996,
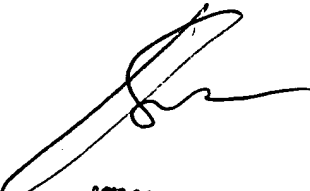
Prentice-Hall Inc., pages 383-386.

  Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Niketa I. Patel whose telephone number is (571) 272 4156. The

examiner can normally be reached on M-F 8:00 A.M. to 5:00 P.M.

  If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dov Popovici can be reached on (571) 272 4083. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent
Application Information Retrieval (PAIR) system. Status information for published applications
may be obtained from either Private PAIR or Public PAIR. Status information for unpublished
applications is available through Private PAIR only. For more information about the PAIR
system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR
system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NP
07/26/2005

KIM HUYNH
PRIMARY EXAMINER